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| 10/088,170 | 03/15/2002 | Katsushisa Kodama | 2002-0364 A | 8849 |

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EXAMINER

SERGEANT, RABON A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1711

DATE MAILED: 07/01/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,170

Applicant(s)

KODAMA ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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1. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, the method of claim 1 contains no definitive process steps and is therefore indefinite. "Subjected to processing" does not qualify as a definitive step.

Secondly, within claims 2, 5, 7, and 11, it is unclear what is being conveyed by the language, "thereby subjecting the amines to processing".

Thirdly, no basis has been set forth for the weight percent value of claim 14.

Lastly, the structure of claim 15 is ambiguous and fails to set forth any process step pertaining to the method for processing decomposed polyol according to claim 1. The claim essentially reads that the method for processing decomposed polyol is combining the method for processing decomposed polyol according with another process. It is not seen that the claim further limits the process set forth in claim 1.

2. Claims 1, 7-10, and 18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for processes wherein alkylene oxide is used to treat the amine containing polyols, does not reasonably provide enablement for processes wherein the amine containing polyols are treated with any oxide, including inorganic oxides, such as metal oxide. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with

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these claims. Applicants have provided enablement only for the use of the disclosed alkylene oxides, and the position is taken that the claims should be so limited.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 4, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 52-139196.

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The reference discloses the treatment of amines in amine containing polyurethane decomposition products with carboxylic acid anhydrides, including dicarboxylic acid anhydrides. See abstract. Though the abstract fails to disclose the limitations set forth within applicants' claims 13 and 14, the position is taken that these features are inherently possessed by the reference, because the amine containing decomposition products are derived from the same source that applicants derive their polyol composition from, namely polyurethanes. Therefore, it follows that the respective amine containing decomposition products are equivalent compositions.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 52-139196.

As aforementioned, the reference discloses the treatment of amine containing polyurethane decomposition products with carboxylic acid anhydrides, including dicarboxylic acid anhydrides. See abstract. Though the reference fails to disclose the use of oxalic acid, the position is taken that one of ordinary skill would have considered carboxylic acid, including oxalic acid, to be a viable substitute for the acid anhydride of the reference, given the chemical similarities between carboxylic acids and their anhydrides. Therefore, the position is taken that it would have been obvious to one of ordinary skill to employ carboxylic acid, including the claimed oxalic acid, within the process of the reference, so as to arrive at the instant invention.

6. Claims 1, 5, 6, 13-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by CA 2,242,980.

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The reference discloses the treatment of amines in amine containing polyurethane decomposition products with isocyanate. See abstract. Though the reference fails to disclose the limitations set forth within applicants' claims 13 and 14, the position is taken that these features are inherently possessed by the reference, because the amine containing decomposition products are derived from the same source that applicants derive their polyol composition from, namely polyurethanes. Therefore, it follows that the respective amine containing decomposition products are equivalent compositions.

7. Claims 1, 7-10, 13-15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 7-224141 or van der Wal ('004).

The references discloses the treatment of amines in amine containing polyurethane decomposition products with alkylene oxide. See abstract of JP 7-224141 and column 6, lines 3+ within van der Wal. Though the abstract of JP 7-224141 fails to disclose the limitations set forth within applicants' claims 13 and 14, the position is taken that these features are inherently possessed by the reference, because the amine containing decomposition products are derived from the same source that applicants derive their polyol composition from, namely polyurethanes. Therefore, it follows that the respective amine containing decomposition products are equivalent compositions.

8. Claims 19 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 54-78798.

The reference discloses the addition of urea to a polyurethane composition under conditions effective to decompose the polyurethane. See abstract. The position is taken that this

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method inherently yields a polyol equivalent to the one claimed, since urea will be in contact with the products formed during the decomposition of the polyurethane.

9. Claims 1, 11-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 54-78798.

The reference discloses the addition of urea to a polyurethane composition under conditions effective to decompose the polyurethane. See abstract. The disclosed process differs from the instant process, in that the instant process requires addition of the urea to the decomposition products rather than the polyurethane; however, the position is taken that it would have been obvious to add the urea to the decomposition products, because one would have expected the urea to perform an equivalent function to the one it performs when added to the polyurethane, namely to aid in the further decomposition of the products. Also, one would have expected an equivalent product to the one formed according to the prior art.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent
June 29, 2003